Abstract ID: 371

Title: Weaning in the New Zealand fur seal, Arctocephalus forsteri

Category: Behavior

**Student**: Doctoral

**Preferred Format**: Either Oral or Poster Presentation

**Abstract**: In mammalian species, offspring nurse until they are nutritionally independent, or in a general sense, weaned. In a broader sense, weaning encompasses an array of changes that occur as an individual approaches this independence. The duration of lactation in the New Zealand fur seal (Arctocephalus forsteri) has been estimated between 8-11 months, but difficulties in monitoring mother/pup pairs in the later stages of lactation have led to a poor understanding of weaning. This project sought to examine the weaning process through daily behavioural monitoring from August to December over two seasons (2001 & 2002). In both years, weaning occurred between late August and mid December with mean date being 26Oct ( $\pm$  15 days, n=151) and 19Oct ( $\pm$  15 days, n=173), respectively (P=.0001). Age at weaning (calculated for pups with known birth date) was 10 months ( $305 \pm 20$  days, n=42). There was no significant difference in pup growth rates or condition between sexes or years. Foraging trip duration significantly differed between months in both years, with increases in foraging trip duration as pups approached weaning (2001, Aug/Sep: 7.64days, Sep/Oct: 9.15 days, Oct/Nov: 10.37days; 2002, Aug/Sep: 5.99days, Sep/Oct: 9.97days, Oct/Nov: 8.33days). Foraging trips were significantly longer in 2001 then 2002 (P=.028). A comparison of pup attendance with tagged mothers (2001, n=32; 2002, n=58) showed that 28% (n=9) and 22% (n=13) of pups, in each year respectively, missed between 1 and 6 entire maternal shore attendance bouts. There were no signs that forcible weaning occured, and the majority of tagged females continued to return and vocalise after pups weaned. Changes in trip duration and attendance as well as the decreasing utilization of maternal presence are possible indicators of pups employing different strategies in the weaning process.